signal levels of the analyzer and the corresponding density

values of the analyzed material. The calibration process is

such that two or more calibration samples having known

different densities of the component are analyzed by the

analysis apparatus to determine the output signal levels of

the analyzer. Thus, the calibration curve is obtained.

On the other hand, quality control is utilized so as to

maintain measurement precision and reliability of the analysis

apparatus. A control sample having a known density is

measured by the analysis apparatus (already calibrated)

periodically. Some measured data acquired by some quality

control measurements during a certain time period are

processed in a statistical manner to obtain a measurement

variation and a data fluctuation of the analyzer in order to

check the measurement precision and the reliability of the

analysis apparatus.

According to the present invention, as recited in claim

1, the calibration information display unit shows calibration

information and first and second quality control information

on a screen at one time (see Fig. 2, for example). The

control unit produces calibration information for each of the

plurality of measurement channels and the first quality

control information for each of the plurality of measurement

channels. Since the calibration information and the quality

control information of the respective measurement channels can

be displayed on the screen at the same time, the conditions of

the respective measurement data of the measurement channels

can be shown to a user. As a result, the user can easily

determine the conditions of the automatic analysis apparatus

and find out if there is any problem with any measurement

channel.

Lin neither discloses nor suggests displaying the

calibration information, let alone displaying the calibration

information and the quality control information at the same

time on the same screen. Instead, Lin discloses an inter-

laboratory performance monitoring system for producing quality

control information (not calibration information) for each

instrument. Lin discloses that the performance of a given

instrument is presented as shown in Fig. 2 of Lin.

Furthermore, as stated in column 12, line 5 to column 14, line

38 and shown in Fig. 2 of Lin, statistical data is produced as

the quality control information of the given instrument in a

laboratory site. Fig. 2 does not show any calibration data

but shows a concordance data chart 100 and table 101 with

standard deviations of the control sample measurements. Since

the calibration information and the quality control

information are not disclosed on the same screen by Lin and,

in fact, since the calibration data of a given instrument is

not displayed at all, a user cannot determine whether or not maintenance of the given instrument is necessary.

In response to response to Applicants' arguments in the outstanding Office Action, that Examiner states that "Lin uses known control samples for calibrating and monitoring the quality of the measurement channels" and that "a control is a way to calibrate and make sure that the instrument or apparatus is functioning properly and accurately". However, it is respectfully submitted that this statement is incorrect. Accordingly, new claim 12 has been added which does not specifically recite the second quality control information since this limitation is not necessary for patentability.

EP 0871034 discloses managing intervals for execution of calibration and shows an example of a display screen in Fig. 22. However, the display in Fig. 22 does not show the measured calibration data and quality control data for each of the instruments simultaneously. As such, it is submitted that the pending claims patentably define the present invention over all of the cited art.
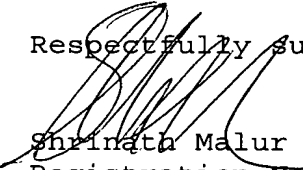

Conclusion

In view of the foregoing remarks, Applicants contend that the above-identified application is now in condition for

allowance.   Accordingly, reconsideration and reexamination are

respectfully requested.

Respectfully Submitted,

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